

**AMENDMENTS TO THE DRAWINGS:**

Please amend the drawings as follows:

Please accept and enter into the case the accompanying replacement formal sheets of drawing, in which the quality has been improved, and each label "figure" has been replaced by "FIG."

## REMARKS

Reconsideration of the above-identified Application is respectfully requested. Claims 7, 12 and 19 are in the case. Claims 1-6, 9-11, 13 and 15-19 were previously canceled. Claims 8, 14 and 20 have been canceled herein. Claims 7, 12 and 19 have been amended. The Drawings have been amended.

Please note that paragraph numbers of the Specification referred to herein are those of the Specification as set forth in U.S. Patent Application Publication No. US 2005/0097154 A1.

Regarding the objection to the Drawings, both sheets of Drawings have been amended such that the quality has been improved, and each label "figure" has been replaced by "FIG", as kindly suggested by the Examiner. In addition, both of the replacement sheets have been labeled "Replacement Sheet." It is respectfully submitted that the objection has thus been overcome. Wherefore reconsideration and withdrawal of this objection are respectfully requested.

Regarding the rejection of Claims 7, 8, 12, 14, 19 and 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shintani et al. in view of Subramanian, Claims 7, 12 and 19 have been amended to overcome the rejection, while Claims 8, 14 and 20 have been canceled thereby rendering this rejection moot with respect thereto. Representative Claim 7 now recites a noise reduction circuit for an RF front end system including "an RF tuner receiving RF signals in multiple channels, and outputting an audio signal based on an RF signal in one of the multiple channels" and a programmable filter "wherein the program settings for the programmable filter determined by the controller depend on the RF channel selected by the user, and wherein the program settings for the programmable filter are determined by characterizing the *audio* noise of the circuit in operation." (Emphasis added.)

It is admitted that Shintani et al. fails to teach the program settings of the programmable filter are determined by characterizing the noise of the circuit in

operation in each RF band. Actually, the noise that is characterized is the noise of the circuit in the audio band. This is manifestly clear in the Specification, e.g., in the Specification in paragraphs [0017] and [0024]. The patent to Shintani et al. fails to teach determining settings of a programmable filter by characterizing noise in the audio band, as well. The patent to Subramanian fails to cure this deficiency of the patent to Shintani et al. The Subramanian patent programs filter coefficients of FIR filters, depending on characteristics of a desired RF channel and the out-of-band noise spectrum. That this teaching is lacking in Subramanian is not surprising, since the purpose of the technique in such patent is RF channel optimization, and not improvement in audio quality, other than incidentally, from possible error rate improvement.

The other art of record is even less relevant.

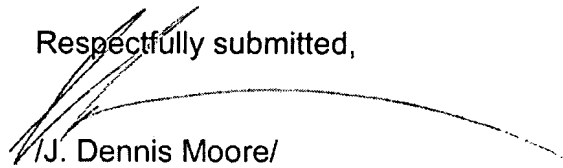
Accordingly, for all of the above reasons, Claim 1 is allowable over Shintani et al., Subramanian and, indeed, all of the art of record, whether considered individually or in any combination. Claims 12 and 19 include similar limitations to those discussed above, and so are allowable as well for the same reasons. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

It is respectfully submitted that the claims recite the patentably distinguishing features of the invention and that, taken together with the above remarks, the present application is now in proper form for allowance. Reconsideration of the application, as amended, and allowance of the claims are requested at an early date.

While it is believed that the instant amendment places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

To the extent necessary, the Applicants petition for an Extension of Time under 37 C.F.R. §1.136. Please charge any fees in connection with the filing of this paper, including extension of time fees to the Deposit Account No. 20-0668 of Texas Instruments Incorporated.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'J. Dennis Moore', is written over a horizontal line.

J. Dennis Moore  
Attorney for Applicant(s)  
Reg. No. 28,885

Texas Instruments Incorporated  
P.O. Box 655474, MS 3999  
Dallas, TX 75265  
Phone: (972) 917-5646  
Fax: (972) 917-4418